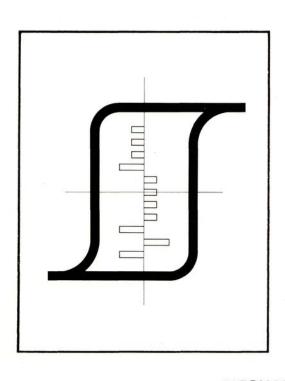


MEMORY PRODUCTS



MEMORY CORE Type FC-5002

The FC-5002 is a 50 mil ferrite memory core which exhibits fast switching speed at moderate drive currents. It is recommended for use in memories having cycle times of 4 to 6 microseconds. At a nominal drive current of 520 milliamperes, FC5002 has a switching time of approximately 0.70 microseconds.

MECHANICAL SPECIFICATIONS

Outside Diameter						0.050"	\pm	0.002"
Inside Diameter						0.030"	\pm	0.002"
Thickness						0.015"	\pm	0.002"

Fracture strength: The core will not fracture when subjected to a compressive force of 200 grams applied between parallel plane surfaces normal to the core diameter.

TYPICAL OPERATING CONDITIONS (at 25°C)

Drive Currents

lr =	lw	=	520 milliamperes
lpw		=	260 milliamperes
tr		=	0.15 microseconds
td		=	2.0 microseconds

Output Signals

uV1 = 120 millivolts dVz = 13 millivolts tp = 0.34 microseconds ts = 0.68 microseconds

TEST SPECIFICATION (at 25°C)

Drive Current Pulse Sequence

All cores are tested using the pulse sequence shown in Figure 1. Cores are delivered 100% tested to a 0.015 AQL as defined by Mil STD-105D, Inspection Level II.

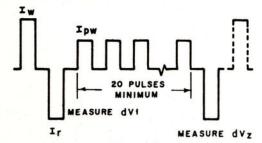


Figure 1.

Test Drive Conditions

 $\begin{array}{lll} \text{lr} &=& \text{lw} &=& 475 \text{ milliamperes} \pm 1\% \\ \text{lpw} &=& 285 \text{ milliamperes} \pm 1\% \\ \text{tr} &=& 0.15 \text{ microseconds} \\ \text{td} &=& 2.0 \text{ microseconds} \end{array}$

Test Output Signals

uV1 = 85 millivolts minimum. The maximum variation in uV1 within a given lot will be no greater than \pm 12%

dVz = 25 millivolts maximum

tp $= 0.35 \pm .04$ microseconds

ts = 0.80 microseconds maximum

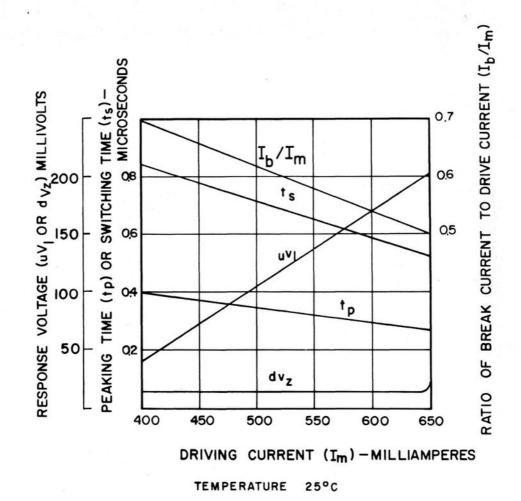


Figure 2. TYPICAL OPERATING CHARACTERISTICS

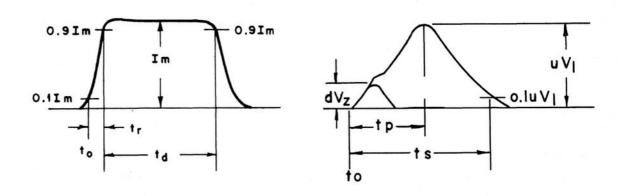


Figure 3. CURRENT PULSE

Figure 4. VOLTAGE RESPONSE

